

EIR Science & Technology

Experts challenge press to tell truth about ozone scare

On June 17, four experts presented a new book at a Washington press conference, which demonstrates that the ozone hole catastrophe does not exist—while the “remedies” for it could kill millions.

*The science magazine 21st Century Science & Technology sponsored a press conference on June 17 to release a new book, *The Holes in the Ozone Scare: The Scientific Evidence That the Sky Isn't Falling*, to media at the National Press Club in Washington, D.C. What follows are edited transcripts of the presentations made by the four principal speakers.*

Hecht: Overturn the Montreal Protocol

Marjorie Mazel Hecht, managing editor of 21st Century Science & Technology, spoke against the Montreal Protocol, an international accord taken among the seven most industrialized nations to phase out the use of chlorofluorocarbons (CFCs), the major chemicals currently in use for refrigeration, on the grounds that they are dangerously enlarging the hole in the ozone layer of the atmosphere.

... We have published *The Holes in the Ozone Scare*, in English and also in French and German, because we are determined to overturn the 1987 Montreal Protocol and its CFC phaseout. Why?

There are three reasons:

First, because the phaseout of CFCs will kill people, millions of people, especially in the developing sector. It will kill people by breaking the cold chain and by making the cost of refrigeration prohibitive. Historically, refrigeration is one of the key measures of health and upping the living standard.

This death toll is in no way speculative. It is very real. It is calculable.

The second reason we are determined to overturn the Montreal Protocol is because there is no scientific evidence for banning CFCs—just ideology, speculation, and computer models that have no agreement with reality.

Finally, we are determined to overturn the Montreal Protocol because we are concerned with really saving this planet and preserving its most important resource and its only creative resource—which is mankind.

The ozone hole scare, like the other issues at the Earth Summit, is really about population, a war against population control. Already there are many casualties, mostly in the developing sector and mostly people of color. We define every individual as being sacred, as having the potential for creativity, being capable of reason, of using science and technology to solve any new problem that comes up and to create new resources. This is our perspective.

Now, who are our opponents? On the other side is a growing irrational movement based on fear and superstition, a movement that defines a human being—and you can read this in this year's *Environmental Almanac*, put out by the World Resources Institute—as someone who produces three-quarters of a ton of solid waste per year. You can see the difference of approach here.

The Montreal Protocol was several years in the making, from the first ozone depletion article to the signing in 1987.

Our opponents view it as a model for other global accords with a global policy mechanism to back it up. For example, the sequel to *Limits to Growth*, a book called *Beyond the Limits*, which was just published in time for the Earth Summit, has a chapter devoted to the Montreal Protocol. Among other things, the chapter says that this is the first time that nations agreed to ban a useful substance “before it had produced any measurable damage to human health or the economy.” So you can see why this is very important for us to overturn.

It not only took several years, but also several millions of dollars to get the Montreal Protocol signed. These millions of dollars flowed to environmental groups for the specific purpose of developing the ozone scare story. Just to take one small example of this, we can look at what one group, the World Resources Institute, based here in Washington received in the past five years:

- in 1986, \$10,000 “to brief European nongovernmental organizations on stratospheric ozone depletion” [from the German Marshall Fund];
- in 1987, \$800,000 [from the Andrew W. Mellon Foundation toward project on greenhouse warming and ozone depletion];
- in both 1987 and 1988, another \$50,000 from the Charles Stewart Mott Foundation “to advance scientific understanding and policy implications on atmospheric changes with potentially major environmental impact: greenhouse warming . . . and depletion of atmospheric ozone.”
- and in 1988, another \$100,000 from the Public Welfare Foundation “for project to further international efforts to protect stratospheric ozone layer.”

During the same time, the group also had \$25 million over five years as an endowment fund.

We don't have millions of dollars, but we have a very powerful weapon—it's called the truth. We are challenging the press, scientists, and representatives of scientific groups here to discover this for themselves. Investigate. Find out. Report on the other side, on what is never heard in the daily press, that there are many, many scientists who don't believe the ozone scare, because their research tells them there's no evidence for it.

Ask the proponents of the ozone scare whether they think there are too many people in the world—this is a very basic question. I've never had a “no” answer to that question when I've asked it of a representative of an environmental group. Ask them how they plan to get rid of the surplus.

Ask Richard Benedick, who built the Montreal Protocol and then wrote a book about it. He was, after all, for years the head of the U.S. State Department's Office of Population.

Ask Sherwood Rowland: He is the one who developed the ozone depletion theory back in 1974. Ask him what he thinks about estimates that 30 to 40 million people will die as a result of this ban. Sherwood Rowland is now the president of the American Association for the Advancement of

Science and he's a signer of the Morelia Declaration, published twice in the *New York Times*. I'll read the last paragraph of this declaration, which has about 30 signers, with his name appearing second on the list. “If the latter half of the 20th century has been marked by human liberation movements, the final decade of the second millennium will be characterized by liberation movements among species, so that one day we can attain genuine equality among all living things.”

I propose that people here ask Dr. Rowland if the CFC ban, which will kill millions of people, represents “genuine equality among all living things.”

So, this is the challenge we pose to the press today in releasing this book.

Maduro: telling the whole story

Rogelio A. Maduro, who co-authored the new book with Ralf Schauerhammer, explained why he wrote The Holes in the Ozone Scare:

One of the fundamental questions that has to be answered here by the press is the whole issue of why the public does not hear from the scientists who contend that the ozone depletion scare is a fraud. Where are these scientists? We only hear one part of the story. That has been the problem: The whole story has not been told.

What is going on in science now in the United States is that the individuals who are pushing the apocalyptic catastrophe theory about ozone depletion are at the top of the scientific institutions that determine what science is. Sherwood Rowland is now the president of the AAAS [American Association for the Advancement of Science]. Ralph Cicerone, another major proponent of the ozone depletion theories, is the head of the American Geophysical Union, and so on and so forth. So, you have a combination of some of the science journals—not all of them—refusing to print any scientific papers that denounce the ozone depletion theory or any aspect of it, and the press doing the same thing. What I would like to go through very quickly is the footpath: How does one actually tell the truth on these issues?

I started looking at the ozone depletion theory back in 1988, almost four years ago, when I was doing articles on global warming. I was a believer, I thought like everyone else that the ozone layer is being depleted by CFCs, I didn't know any better. In the course of one interview with Reid Bryson from the University of Wisconsin, he suddenly said something about a volcano in Antarctica putting more chlorine into the atmosphere than the entire total annual emissions from CFCs.

I was extremely provoked because I'm a geologist by training, and volcanoes and paleontology were some of my favorite subjects of study. So after talking to him I had to find out about this volcano. I called the leading volcanologist in the United States, and after a few other phone calls and

getting a few papers, by fax and by mail, it was completely clear that what Bryson said was true: The volcano, Mt. Erebus, was pumping over 1,000 tons of chlorine a day into the atmosphere. And this is in the Antarctic where the atmosphere is extremely dry. Usually what happens to chlorine that is emitted from volcanoes and oceans is that a lot of it is brought back down because of precipitation. Humidity, water dissolves it. But the atmosphere [in Antarctica] is very, very dry. So this chlorine is not being precipitated.

The most curious thing I found out in the process of talking to all these volcanologists, who were completely outraged at this ozone depletion theory, was that this volcano happens to be 10 kilometers upwind from McMurdo Sound station, which is where scientists are taking all the measurements of chlorine concentrations in Antarctica.

Of course, chlorine is the culprit; CFCs don't do absolutely anything to ozone. What allegedly kills ozone in the stratosphere is when the chlorine molecules from CFCs are broken up and the chlorine molecule goes around like a little "Pac-man" and gobbles up all the ozone.

So the measuring station is 10 kilometers downwind from this volcano, which is pumping 1,000 tons of chlorine a day into the atmosphere and scientists are sending up balloons to measure chlorine in the atmosphere, taking measurements at the station, and so on and so forth, and reporting a huge concentration of chlorine in Antarctica, which, of course, could only come from CFCs!

And nowhere in the literature do you find the fact that there is a volcano right next door. And what they are doing is sending the balloons up right through the volcanic cloud. This is very typical of how the whole story has been done: The alternative view, the actual scientific truth, is not presented. This is called lying by omission, and we find its footprints all over the ozone depletion theory and other global catastrophe theories like global warming.

Now, this brings me to the first topic covered in the book: What are the actual sources of chlorine? In the book, I have extensive documentation. (One of the journalists present in this room has counted the references, 191 of them.) . . . The book goes through systematically, step-by-step, point-by-point, refuting every single tenet of the ozone depletion theory. It's in the book, you can read it. What I'm going to go through, as I said, is the story of how I came across this evidence.

Most of the references in the book are from scientific journals. The scientific literature is already available with articles that refute every tenet of the ozone depletion theory and beyond. I list a number of the scientists whom I interviewed. I traveled around the world. I spent almost six weeks in Europe, where I met the leading European scientists, atmospheric scientists, who were completely outraged at the ozone depletion theory, and the claims of the theorists. I traveled throughout the United States. I spent a lot of time

on the phone interviewing scientists, and the names of most of them are in the book.

Some of these scientists, and almost everybody in the refrigeration industry and other industries affected by the ban on CFCs, however, did not wish their name printed. . . .

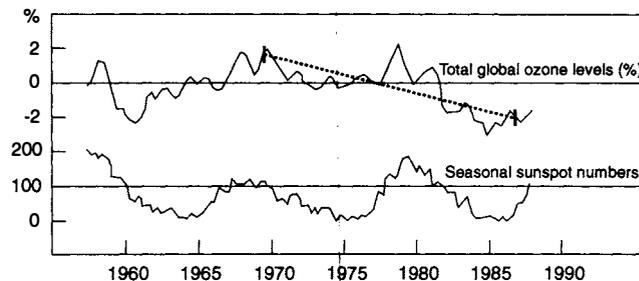
In terms of the natural sources of chlorine we have the leading volcanologists from around the world on our side. One of them, as a matter of fact, the person who wrote the foreword to the book, Haroun Tazieff, is one of the world's leading volcanologists.

The second issue that the book goes through, and one of the most outrageous, is the claim that the ozone layer itself is being depleted. There's a very large number of scientists around the world who are saying that the data have been falsified, that the people presenting all this data have actually doctored the data using mathematical models and re-analyzing the data without actually consulting with the scientists who took the readings.

The way it works is that there are more than 80 reading

Comparison of seasonal values of sunspot number with variations in TOTAL global ozone

(1958 through August 1988)



An 11-year and a 22-year cycle in ozone levels, matching the Sun's sunspot cycle, are clearly evident. A large number of sunspots indicates violent disturbance of the Sun's surface, with outbursts of particles and radiation.

Note the 1962 and 1985 ozone minimums. The 1962 ozone minimum is never mentioned by the ozone alarmists. The dotted line from 1969 to 1986 indicates the time frame used by the Ozone Trends Panel to conduct its "analysis" of global ozone data. As Fred Singer and other scientists have noted, the alleged ozone depletion shown is entirely an artifact of the starting and ending dates. Had the ozone trends panel used the same 17-year period (1½ solar cycles), but started in 1962 and ended in 1979, the data would have shown an increase in the thickness of the ozone layer of the same magnitude as the decrease the Ozone Trends Panel reported. In other words, using the same methodology of the Ozone Trends Panel, one can also "prove" that CFCs increase the thickness of the ozone layer!

Source: Adapted from J.K. Angell, "On the Relation Between Atmospheric Ozone and Sunspot Number," *Journal of Climate*, November 1989.

stations over the world, where scientists might spend 5, 10, 20, 30 years of their lives taking daily readings of ozone two or three times a day. And they send those readings to Toronto, Canada, where the world ozone center gathers all the data. Now, it's a very difficult thing to do, to measure the thickness of the ozone layer; it's very complicated to make a judgment as to what the actual readings are. So if you're going to examine those data you have to go to the people who took them to really know what they did with them. And what the proponents of the ozone depletion theory basically then do—these are the people in Toronto, who got the data—is re-analyze them. . . . They simply took the data and said we know better than anybody else; we're going to re-analyze these data. And they took data where the trends show there is *no* change in ozone thickness, and suddenly the trend shows a *decrease* in ozone.

Many scientists have denounced this whole issue of re-analysis, massaging of ozone data. This includes S. Fred Singer, who designed the original instrument that is used to measure the thickness of the ozone layer and was sent up in satellites. It includes Desmond Walshaw, the former president of the World Ozone Commission, who was Gordon Dobson's personal assistant for more than 20 years.

Gordon Dobson, as most of you probably know, is the pioneer researcher of the ozone layer. I quote from my interview with Walshaw where he was completely outraged over what is going on. Another is Soren Larsen from Norway, again one of the leading ozone layer researchers. He was a student of Gordon Dobson, and it's the same thing. I have an interview with him in the book and have details of his papers that he has published, refuting the idea that ozone is being depleted. There is also Marcel Ackerman, who is the head of the Belgian Institute for Aeronomic Studies. He is one of those people who is outraged at what has been done. He says that the people who gathered the data are seeing their data regurgitated by these desktop scientists who spend their time in an office taking other people's data and re-analyzing them. He says that the researchers realize that the data they actually took with the instruments do not correspond to the data that are re-analyzed.

Now, to illustrate how this works, I want to show you a very important chart on page 78 of the book (see figure). I want everybody to look at this closely. What you see in this chart on top are the total levels of ozone, starting around 1958 until 1987. And you see this long-term trend, cyclic changes in ozone. At the bottom, you see the seasonal sunspot number. What these leading scientists are saying, is that the thickness of the ozone layer is very much related to the sunspot number and other solar influences. Ozone, despite what some people say, is not some sort of nonrenewable resource. That is absolute nonsense. Ozone is constantly being created and destroyed, every instant. Billions of tons of ozone are created and destroyed by ultraviolet radiation,

which breaks down oxygen that then splits up and rejoins either as oxygen again or as ozone. This is a constant process, constantly going on.

What determines the thickness of the ozone layer, to a large extent, is how much ultraviolet radiation is reaching the Earth. The more ultraviolet that reaches the Earth, the more ozone that is created, and vice versa.

Now, go back to this chart. What does the Ozone Trends Panel do? The panel released this report in March 1988, claiming proof that the ozone layer has been depleted. Actually the panel didn't even release a report; they gave a press conference. I'll get to that in a minute. Their starting date is 1969 and their ending date was 1986, which is very curious. It's a 17-year cycle, which is one and a half solar cycles, so they're not taking the whole cycle into consideration. But most curious, if you notice, they took a peak in the thickness of the ozone layer as their beginning, and they took the bottom of a cycle as the last year.

There was no reason why they could not have taken a 22-year cycle or begun in 1962, which is the historical ozone lull. This is the kind of skullduggery that one finds in how the ozone depletion scare is being manipulated. The Ozone Trends Panel press conference was supposed to be followed by a report documenting where the panel got its data. To this day, that report has not been released. More than four years later, they still have not presented the scientific evidence—which is an outrage. And we find that systematically.

The ozone depletion theorists have given all these press conferences, three of them in the past year and a half, claiming some horrible ozone catastrophe, and there was no scientific evidence to back up what they were saying. The last press conference was Feb. 3. They gave the press conference before they had even gathered the data!

As some of you may have learned, NASA had to retract everything it said at the end of April. At an April 20 press conference, NASA said, "Well, sorry guys, there is not an ozone hole on top of George Bush's house." [See *EIR*, March 27, *Science & Technology* section for a full discussion of the Northern Hemisphere ozone depletion hoax.]

The next topic in the book is what actually happens to CFCs. Again there is a tremendous debate in the scientific community as to what is going on. Dr. Robert Pease, from the University of California at Irvine has written a series of papers noting the fact that there is no actual evidence that CFCs are being broken up in the stratosphere. What he thinks is going on, [a view] which is shared by physical atmospheric scientists, is that the stratosphere is an inversion layer. This means that in the entire stratosphere it gets warmer as you go up. What's happening is that CFCs are getting up there and coming right back down. There is no evidence that CFCs are being broken up in the stratosphere, because they are not reaching the altitudes where you find the wavelengths of ultraviolet radiation required to break down the CFCs. So

there is no evidence that CFCs are even being broken down.

There are other groups of scientists who have been noting something extremely interesting: There are many more sinks for CFCs than what has been previously believed. Their evidence indicates that CFCs are being destroyed by anaerobic bacteria in soils, or may be destroyed by bacteria at the surface of the oceans, or that CFCs are being deposited in soils and are being either destroyed or just captured by plant matter, and so on.

There are actually many different ways that CFCs are being destroyed, none of which is being taken into account in the ozone depletion theory. The ozone depletion theory simply says that CFCs are indestructible; nothing happens to them. Those scientists include Reinhold Rasmussen, from the Oregon Graduate Center, Dean Hegg, from the University of Washington, and Derek Lovely, from the U. S. Geological Survey, who gave a press conference releasing one of his papers just a month ago, in which he documents there are now anaerobic bacteria in mud flats and in the Potomac River that are breaking down CFCs.

Again we don't hear very much about this in the press. That's the side of the story that is never discussed.

Then there is the issue of the Antarctic ozone hole. I would like to point out, as I do in the book, that the ozone hole was discovered in 1958 by Gordon Dobson, on the first expedition to Antarctica. Now, some people argue he didn't really discover the ozone hole, because he didn't quite see what they're seeing today, that the levels of ozone then did not go down as far as they do today. However, in 1958 a team of scientists, at the French Antarctic station at Dumont d'Urville, which is 600 miles on the other side of Antarctica, from Halley Bay, which is where Dobson's people were taking the readings, did indeed measure and see the ozone hole, and the measured levels of ozone were *lower* than any measurement of ozone observed in the past 10 years—and that was in 1958. Again, you don't see this mentioned in the press.

A group of scientists from Japan and other parts in the United States have been pointing out that there is ample evidence to indicate that what goes on in Antarctica may be a combination of dynamics of the atmosphere and other phenomena, none of which involves CFCs. Nobody really knows where this chlorine in Antarctica comes from. There is no way of telling whether it comes from CFCs or from natural sources. As I document in the first chapter, the natural sources are 10,000 times more abundant than CFCs.

One of the sidelights I'd like to point out is the fact that the so-called present-day ozone hole was not discovered by Joseph Farman, who gets the credit in the scientific literature. It was discovered by a Japanese scientist, Shigeru Chubachi, who described a deepening or thinning of the ozone layer on top of Antarctica for the one- or two-month period of the year when it occurs. Chubachi published his discovery in

the literature two years before Joseph Farman published his paper in *Nature* in 1985. The book goes through in great detail what scientific literature exists, and which individual scientists are challenging this. What I would like to challenge you to do, is not to take what I say on face value. Do the footwork. Look at the literature yourself. Do the interviews yourself. You will find out very quickly that there is no evidence whatsoever to indicate that first, the ozone layer is being depleted; second, that the CFCs present any danger whatsoever to the ozone layer; or third, that the levels of ultraviolet radiation that are reaching the Earth are increasing, which is what the scare story is about—ultraviolet levels are increasing and everyone is going to get skin cancer.

Ellsaesser: Atmospheric scientist speaks out

Dr. Hugh Ellsaesser an atmospheric scientist who is now a participating guest scientist (non-employee) at Lawrence Livermore National Laboratory. He retired from the Air Force weather service after 21 years as a weather officer and from Lawrence Livermore Laboratory after 24 years in climate research. In recent years, as he describes himself, he has investigated many of the largely unsubstantiated claims that man is fouling his nest. He has been fighting on this issue for a good number of years.

I'm very happy to see this book appear, because I think the public deserves to have a close look at the many other aspects of this issue beyond the simple rote that releasing CFCs into the atmosphere is going to give us all more skin cancer. There are a lot more aspects to that, there are an awful lot of contradictions, a lot of things that are not known, and this book brings them together so that a person can be exposed to them and see that there's much more to the problem than they've been hearing about.

Now, this particular hazard has been brought to public attention and created as a national hazard, a worldwide hazard, by a very familiar process; that is, by looking at the issue through a one-way filter. The first thing you do, is to ignore any possible benefits that might derive from the product and to exaggerate all those things that are detrimental. Now, I developed this idea when I was working with a project studying the supersonic transport (SST). We were given the pilot project of finding out what the effect of the supersonic transports would be, and we were to look *only* at the exhaust coming out of the tailpipe. We were specifically told we were not to look for any benefits that we might get by using a supersonic transport.

In other words, it's just like setting up a committee to decide whether the human race should have any more babies. And when the committee goes out of the room to make their deliberation, the last thing the judge tells them is that you can only consider the problem of dealing with the bodily effluent involved. Now if you told the committee that, what

sort of answer would you expect them to get? You'd expect them to come back and say that we can't afford to do this any more!

Well, this is exactly what they're doing also with the ozone problem. They're exaggerating the hazards and ignoring the benefits.

Now, ultraviolet radiation on an annual mean basis varies fiftyfold between the poles and the equator. That's 5,000%. Now I would like someone to tell me at what latitude is it at an optimum that should not be changed? In terms of skin cancer, they have decided that a 1% decrease in the ozone layer is equivalent to a 2% increase in skin cancer incidence, and the latest report is 2.4%. Now, this is a theoretical or a predicted value—it's computed. From actual statistics, a 2% increase in skin cancer incidence in the mid-latitudes where we live is equivalent to moving 12 miles toward the equator. Or, to moving to a 300 foot higher elevation. These particular aspects of the problem by which the public might be able to judge it for themselves, have been studiously suppressed.

Now, what about the benefits of ultraviolet radiation? Vitamin D is available to very few animals or in plants, that is, being produced within the animal itself. The only source we have that is commonly known is cod liver oil. The codfish lives in a dark world, most of the time, and it has no access to ultraviolet to produce its vitamin D, so it has to have a mechanism to produce it themselves. For the rest of us, we get vitamin D by having the oils on our outer covering exposed to the ultraviolet light from the Sun. The animals that have furs and feathers get their vitamin D by preening themselves, preening their feathers, preening their fur.

If you get too little vitamin D or too little ultraviolet, which is what produces the vitamin D, you get rickets in childhood and you get osteomalacia in later life. In later years, because you didn't build a strong enough skeleton, once you start calcium loss in older age, you get osteomalacia. Now, within the U.S. at the present time, among the 20 million people who have osteomalacia, there are more cases of bone fracture, approximately twice as many bone fractures per year, as there are new cases of skin cancer.

In addition to this problem with the skeleton that is related to vitamin D exposure, there is a group of doctors in Canada who have been investigating colon and breast cancer for a number of years, and they find that there is an inverse relationship between these two cancers and the amount of exposure to sunlight. It's quite probable that there are other diseases that are related in an inverse way to exposure to ultraviolet radiation. But no one is looking for those things. The government is not spending any money looking for benefits of the increased ultraviolet radiation. It's looking only for detriments.

Ultraviolet radiation is also a biocide; it's a deodorant, and the EPA is suggesting it as a possible replacement for water fluoridation. And I think it's worth noting at this point

that the cholera epidemic we're now having in South America has been attributed to a beginning in the phasing out of chlorination of water.

In other words, there are many reasons for which I have come to believe that if we were to increase the ultraviolet flux that we receive around the Earth, it would be a net benefit to life on Earth. Now, there is an example here of a parallel with DDT. DDT was banned 20 years ago. There was just recently an acknowledgment of it [at a press conference on May 25; see "Population Control Lobby Banned DDT To Kill More People," *EIR*, June 19]. It was banned purely for political reasons. There was a very lengthy investigation, the chairman of the investigating committee concluded that there was no scientific reason for banning it and it had many benefits. In spite of that, [EPA administrator William] Ruckelshaus banned it. We are now finding that the DDT does not cause eggshells of birds to thin, we are finding that most of the effects that it has on humans that we know about are beneficial, and we know that it is the one chemical that has saved the most human lives that we know of, primarily as an effect on malaria. Why should we repeat this mistake with CFCs?

We have been hearing much recently about the trends in the mean global ozone level. As Roger pointed out, most of those studies have started from 1969, when there was a peak in the ozone. Things that they do not point out, is that total ozone increased from 1961 to 1969. And we do not know why, even today. The minimum in ozone around 1986 was very close to the minimum in 1968! We cannot say specifically whether it was the same as or less than or more than, because the changes in the observing stations, the types of measurements, the calibration of the instruments, have gone through so many evolutions that we can't make a definite statement on that. But if you look at the curve in his book, you can see that they are fairly close.

The recent decline, which has been the one that has been most strongly publicized, has followed very closely the solar cycle, the change in the number of sunspots. The minimum in ozone was reached in 1986 at the same time the minimum in the solar cycle was reached. Since 1986, total ozone has been increasing, which is something else you don't hear much about.

There are at least a half a dozen scientists who have been publishing papers in the scientific literature claiming or at least pointing out reasons to believe that many of the changes in ozone that we have been seeing, the changes in the ozone layer, including variations in the amount within the ozone hole itself, are related to dynamics; that is, to the motion, the circulation within the atmosphere, the general circulation, or to the sea surface temperature; and it is a strange relationship for a variable which is supposed to be determined by chemistry in the stratosphere, which should be totally unrelated to these other features.

The one thing that stands out is that in all of these studies that have found a decrease in ozone in recent years, there has been no decline in ozone over the equator. It is over the equator that the depth of the ozone layer is determined almost entirely by chemistry, where transport has very little to do with it. Ozone is generated there and removed into higher latitudes and lower levels where it goes into storage. If there was a chemical attack on the ozone, the place where you would expect to identify it most unambiguously is over the equator. Yet the total depth of ozone over the equator has not

"I took a balloon, and I pumped it full of Freon 12. I tied it with a rubber band, and I started to bounce it, as you would a balloon. It went to the ground like a lead balloon, it was so heavy, the molecular weight and, even in a gaseous form, there's no buoyancy to that balloon: It went down and stayed down."

—Robert Holtzknecht

changed in recent years.

The ozone hole is also self-limiting. It occurs only between about 12 and 22 kilometers in the vertical and within the Antarctic polar vortex which develops over the winter-time because of the absence of sunlight; and in 1987 the ozone hole, within that area that is affected, went to essentially zero. It was 5% of its normal level, and, with the precision of the instruments, that is essentially zero.

The only way it can be any greater or any worse than it was in 1987 is if the atmosphere gets colder so it precipitates out more water vapor out in clouds to start the process going; there is more water vapor in the stratosphere, which would have the same effect; or for the vortex itself to increase in size. We have no reason to believe that any of those things are going to happen.

Now, there's another aspect to this which I think bears investigation. At the same time as we have been seeing a decrease in ozone in these recent years, they keep pointing out to us that there has been an increase in ozone within the troposphere, the region below the stratosphere. The one thing that seems to make sense with this information is that the warming we have had in recent years in the tropical regions, which is where the warming has been primarily, has caused an intensification in the convective activity in the tropics, which then intensifies the transfer of air from the troposphere

to the stratosphere.

If you intensify that transfer from the troposphere to the stratosphere, it means that you are going to sweep the ozone out of the lower stratosphere where it is held in storage more rapidly and bring it back into the troposphere. The decreases that they have been finding and claiming have been in the lower stratosphere, around 20 kilometers up. So, there seems to be a relationship, at least timewise, between the decrease in ozone that they are claiming in the lower stratosphere and the increase in ozone that they have been observing in the troposphere in the last 15 years or so.

So, I think it's well worth looking at this as a possibility to explain what little decrease we have seen in the ozone layer in recent years; but, remember that the decrease in 1986 is almost the same minimum as in 1961, and we still don't know why that minimum occurred.

Holtzknecht: Ozone scare is brainwashing

Bob Holtzknecht, an automotive air specialist from Cocoa, Florida, has devoted the past 17 years to studying, experimenting with, and writing about the technical problems and their solutions facing those who repair auto air conditioning systems professionally. He founded the Automotive Air Group and for many years edited its newsletter. He now coordinates the Ozone Truth Squad.

There are so many facets to this ozone story that we couldn't exhaust this thing if this were a three-day session. I'm going to just hit a few topics and for anybody who cares to explore them further, I'm available either here or back in Florida and I'll be glad to accommodate you.

The book is so well documented that anybody who really wants to know the truth, and the truth is on our side—all they have to do is check through Maduro's research and his references, and you'll find that it's unmistakable that this whole ozone depletion theory is a fraud. It's a hoax, and it's a deliberate fraud. It's not a matter of mismeasurements or misinterpretation: It's deliberate, it's brainwashing, just as you people are brainwashed. We hope that we can scrub some of the brainwashing out.

Brainwashing—I see some smiles—okay I'm hurting your feelings—but brainwashing is here, it's with us, and it always happens to *other* people. It's accomplished by controlling input information to an individual or to a group and by withholding alternative data or even the fact that alternative data exist. A classic example: I guess we're all in this room old enough to remember the Rev. Jim Jones down in Guyana, 700 [sic] of his followers were persuaded to drink poison Kool-Aid because they were brainwashed into believing that this was their only way out of an imagined predicament that they were in. They were in no predicament, but they were brainwashed into it. Just as it is possible for 700 people to be brainwashed to that extent, you and I can be

brainwashed; I was brainwashed for a while until, in my job, after making money for 20 years, I began hearing about this ozone depletion, how they're going to cut off the production of freon. My business is repairing automobile air conditioning systems and working with this, and I knew it couldn't be so: that transport of freon from the ground level up to stratosphere just seemed impossible for me. We worked with electronic leak detectors for freon that can detect a leak as small as one-quarter ounce per year, which is pretty tight. We can track these leaks, and they don't waft out; they don't rise up into the stratosphere, they go straight down, like a leaky water pipe, they go down.

Just last week, I conducted a little informal experiment just to get a better feel for this, just how fast they go down, and how directly, how quickly do they stratify. They don't mix with air. This cost me a lot of money to find out, but I took a balloon, and I pumped it full of Freon 12, right out the cylinder. I tied it with a rubber band and I started to bounce it, as you would a balloon. It went to the ground like a lead balloon, it was so heavy, the molecular weight, and, even in a gaseous form, there's no buoyancy to that balloon: It went down and stayed down.

Now, the leaky freon, leaking from the system goes down into the pores of the Earth, maybe one-tenth of 1% might get into the atmosphere and maybe an infinitesimal part of that might go into the stratosphere, but very little.

When you see a picture of the hole over the ozone, it's usually taken from data taken from the Nimbus satellite. Every couple of years, NASA has another press conference, to say, "Oh, it's worse than we thought, there's less ozone than we originally figured."

But, it isn't so. Fred Singer, who designed the instrument that measures ozone for NASA, says: No wonder it reads less every year, because the sensor plates are worn out. The darn thing has exceeded its lifespan, yet it keeps sending back data, which NASA takes to say that the ozone levels are getting worse.

NASA always has redundancy. In June of last year, they put up this beautiful satellite, it's been spinning around there for three-quarters of a year—and not a word about what they've found. They went up there to measure CFCs in the stratosphere; they went up there to measure ozone in the stratosphere: The silence is deafening.

In March of this year, again, to be redundant, NASA sent up the Atlantis shuttle, again, to measure what's up there, to find out if there is any ozone depletion, to find out if there are any CFCs. They've promised results the following month. Now, it's been four months and they still haven't released any data from it. . . .

I'll go to the other end of this Rube Goldberg chain which is the ozone depletion theory from the rise of the CFCs, where they gobble up a finite amount of ozone and go all the way down to the end of this Rube Goldberg linkage to skin

cancer. There is no more skin cancer today than there was many years ago that cannot be accounted for by lifestyle. When I was a boy, everybody wore hats, we wore sleeves, and we worked 48 hours in a normal work week. Now, we have more time and leisure, more fun in the Sun, and we get more exposure; but nevertheless the lethal type of skin cancer is very, very scarce. On the way here, my wife showed me an article she was reading in the July issue of *Good Housekeeping* magazine. Now the headline on this, if you read it casually, as most of you would read it, says that due to the rapidly depleting ozone layer, by the end of this century, 1 out of 75 people will die of skin cancer—which, of course, is absurd. I've read the medical literature, and I've read the American Cancer Society literature. They predict that by the year 2000, they'll have skin cancer, the malignant type, malignant melanoma, to the point that the fatalities from that will be down to 1 or 2%.

The other types, the much more common types are so easily treated that the typical treatment, is to take a Q-tip of liquid nitrogen and touch it on the spot—on the forearms, or on the head, or on the nose—and that's it. It'll scab over in a couple of days, and it's gone. No sutures, no cutting—it's finished.

Malignant melanoma is a lot different. You can get it anywhere you have a mole, or a birthmark, or a dark spot. It is not the skin cancer per se that the cells of the skin get it. It's the pigment between the cells, and they all start with a mole or some regular discoloration, and then it goes wild. But, those can occur in places where the Sun doesn't shine. It cannot be as a result of the exposure to UV rays because you get it in the armpits, you get it between the toes, you get it under the fingernails, you get it in the mouth, you get it in the genital area, places where the Sun never shines.

Now Roger and Dr. Ellsaesser have destroyed scientifically all the steps along the way in this ozone hole scare. It just ain't so. You don't fix something that ain't broke.

There's a lot of greed in this. Du Pont is expecting to make billions and billions of dollars on their new replacement for freon which is HFC 134A or Suva. But 134A will not be a replacement inside any existing air conditioning system. If you put it into a system which had previously been charged with freon, it will corrode, and will destroy itself in a very short time. That means that every air conditioning system and refrigerator, freezer, your dairy cases at the supermarket, and so forth, will have to be scrapped, when you no longer have freon to service it.

Doesn't that scare you a little bit? That's not only the systems already in use: That's every one that comes off the production line this year, or next year. In my laboratory in Cocoa, we did discover some alternatives that are ozone friendly, and they're cheap. If we can take the profit out of Suva, maybe this whole thing, ozone depletion thing will fall of its own weight.